

1. Find the prime factorization of 1240 using three different methods.

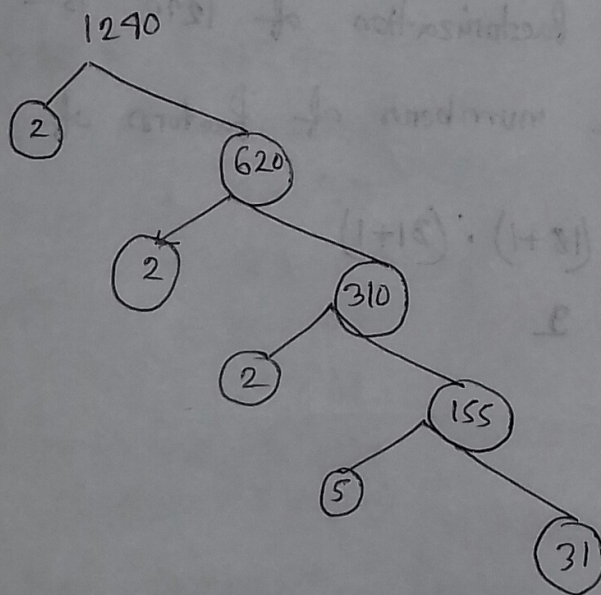
★ Division method:

$$\begin{array}{r} 2 \overline{) 1240} \\ \underline{2 620} \\ 2 310 \\ \underline{5 155} \\ 31 \end{array}$$

★ multiplication method

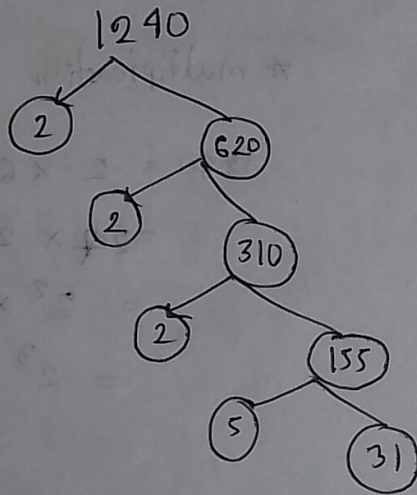
$$\begin{aligned} 1240 &= 2 \times 620 \\ &= 2 \times 2 \times 310 \\ &= 2^2 \times 2 \times 155 \\ &= 2^3 \times 5 \times 31 \end{aligned}$$

★ Tree Diagram



Therefore, the prime factorization of 1240 is
 $= 2^3 \cdot 5 \cdot 31$

2. Find the all factors of 1240 using tree diagram



\therefore The prime factorization of 1240 is $= 2^3 \cdot 5 \cdot 31$

So, the total numbers of factors of 1240 is

$$= (3+1) \cdot (1+1) \cdot (1+1)$$

$$= 4 \cdot 2 \cdot 2$$

$$= 16$$

3. Find all the prime factors of 1240 ?

$$\begin{array}{r} 2 \overline{) 1240} \\ \underline{2 620} \\ 2 310 \\ \underline{2 155} \\ 5 31 \end{array}$$

\therefore All the prime factors of 1240 are = 2, 2, 2, 5, 31

4. Find the all composite factors of 1240 ?

$$\begin{aligned} 1240 &= 1 \times 1240 \\ &= 2 \times 620 \\ &= 4 \times 310 \\ &= 8 \times 155 \\ &= 10 \times 124 \\ &= 20 \times 62 \\ &= 31 \times 40 \\ &= 5 \times 248 \end{aligned}$$

\therefore All the composite factors of 1240 are

2, 4, 8, 10, 20, 31, 40, 62, 124,
155, 310, 620, 1240, 5, 248